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BASE CLUSTER DEFENSE:
THE THIN LINE

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A Monograph
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ABSTRACT

BASE CLUSTER DEFENSE: THE THIN LINE by Major Mark A. Bellini, 52 pages.

This monograph examines the challenges of defending vital Combat Service Support (CSS) assets at the brigade level. The self defense mission inherent for Forward Support Battalions is evaluated to determine if current doctrine is adequate. Self defense missions are difficult for support units in the dispersed brigade support area, especially given their low combat power.

After defining the question and methodology used for the study, this monograph examines the evolution of German defense doctrine and techniques used during Operation Barbarossa, the invasion of Russia in 1941. The challenges that faced the Germans then are similar in nature to those confronting CSS unit commanders in establishing viable defense plans today.

Next, the moral aspects of soldiers engaged in defensive combat operations are incorporated into the evaluation of techniques and doctrine used during operation Barbarossa and in the subsequent review of U.S. doctrine.

Current U.S. doctrine is then reviewed as a basis for examining how CSS units plan and execute base and base cluster defense operations in the field. The common findings from the National Training Center and the Center for Army Lessons Learned are highlighted to demonstrate how well our doctrine is applied and how well it works.

Finally, the above information is compared and analyzed to determine if improvements in CSS defense doctrine or techniques are needed. The monograph concludes that U.S. doctrine emphasizes perimeter defense to the exclusion of a more appropriate method, the strong point defense.

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Chapter 1

Introduction

A difficult challenge facing commanders today is rear area protection. In deciding how to provide security for their support units, commanders face a dilemma. Combat units involved in rear operations are not available for the close and deep fights. Yet, if the rear area is unprotected and subsequently destroyed the risk increases significantly for the supported force. This monograph will examine the situation of a heavy brigade rear area to determine if U.S. Army doctrine is suitable to the Army's needs of rear area security.

Current and emerging U.S. Army doctrine is outlined in Field Manuals (FM) 90-14 Rear Operations dated June 85 and 71-100-1 Armor and Mechanized Division Operations (Coordinating Draft) dated May 1991.¹ Both manuals designate base and base cluster defense as the first defensive system for combat service support (CSS) units. This doctrine of self defense for lightly armed units whose soldiers are primarily trained in support skills is an economy of force mission as defined in FM 100-5 Operations.² Under this doctrine, support units will form bases and

establish base perimeters to defend to protect base assets. A group of bases will form a base cluster so their defense can be directed by a single commander, usually the senior base commander.

The extent and nature of the threat to brigade rear areas in any given scenario is problematic. However, the fact remains that rear areas and lines of communication (LOC) historically have been disrupted, attacked, and exploited, often with disastrous results for the side attacked. Combat units require continuous supplies of fuel, parts, food and other items to maintain their combat effectiveness. Any disruption of the support flow to them will inevitably have an effect on combat operations. Support soldiers who are dead or engaged constantly in defending themselves by manning an extended perimeter as U.S. doctrine currently dictates, are of little value on the battlefield because they are not able to fulfill fully their support roles.

The U.S. Army focused its doctrine and force structure for the past 40 years toward countering the Soviet threat. Much of our doctrine and equipment is directly related to defending western Europe from the Soviets. At the time this is written (Fall 91), the Soviet threat is lessening. The Soviet Union is disbanding rapidly. Currently, the Soviet Union is

more concerned about solving domestic issues and concentrating less on power projection into western Europe. However, even if Europe is safe from external threats, the Soviets have exported their style of warfare to many other regions in the world where U.S. forces could be employed. One area in particular is Korea where the North Korean People's Army has adopted many Soviet characteristics. The President of North Korea, Kim Il-Song, was a major in the Soviet Army and his nation founded its army on the Soviet-model.³ The U.S. Army is currently training against a Soviet-model force at the National Training Center (NTC) and other Combat Maneuver Training Centers (CMTC). Therefore, the Soviet threat model is appropriate for this analysis.

The Soviets have viewed our support areas as high pay off, lucrative targets.⁴ They learned how effective attacking rear areas can be during World War II. The Soviets repeatedly attacked German rear areas. In doing so they disrupted German rear areas and forced the German Army to divert thousands of troops from the front lines to counter this threat.

Assumptions and Criteria

I have made certain assumptions in examining the historical, moral, and doctrinal evidence for this study. First that U.S. forces will face a Soviet-model

threat that views disrupting rear operations as part of its warfighting philosophy. Also despite the Army's attempt to downsize, the force structure of divisional support units will not change in the near future. Thus, for this paper the assumption is made that unit manning and equipment in the heavy division will remain the same.

The last assumption is that CSS doctrine will remain stable. Changes in CSS doctrine, tactics, techniques, and procedures for support could change the defense challenges facing CSS units. These assumptions are made to isolate as many variables as possible to facilitate evaluating rear area defense doctrine.

The criteria used to develop conclusions are tied directly to the assumptions. Since a stable force structure at the unit level, coupled with stable doctrine against a Soviet style threat is assumed, it is important that the criteria meet such an environment and be recognized as viable for decision making. Radical changes in force structure, equipment, and doctrine to protect rear areas are not acceptable or feasible methods in the near term. Therefore, there needs to be a balance between what will be effective and what the Army can afford to implement. The criteria then for this study are suitability, feasibility and acceptability. These three criteria

are routinely used in military decision making."

Methodology

German defensive doctrine evolved dramatically on the Russian front during World War II. The doctrine changed to compensate for Germany's declining combat power during Operation Barbarossa. Strong Soviet counter attacks and the severe winter weather of 1941 stalled the advancing German Army on the Russian steppes. To survive, the Germans adopted the strong point defense. This is a system of tactically dispersed fighting positions composed of small groups of soldiers. Against superior forces, they used this technique to conserve combat power for future battles.

Historical examples are important to examine for lessons others have learned but they tell only what happened in a certain situation under a certain caliber of leadership. To further broaden the analysis, this study will incorporate the moral domain aspects of defense, drawing from the works of the noted, albeit controversial, writer on this subject, S.L.A. Marshall. Historical examples and moral domain aspects will then be incorporated into the analysis of current U.S. doctrine and capabilities. Finally, current doctrine will be compared against how units actually apply it to draw the study's conclusions.

Chapter 2

Historical Background

In World War II, the German Army fought on many fronts simultaneously. One of their most difficult campaigns was Operation Barbarossa, the 1941 summer invasion of Russia. It is yet unclear why Hitler decided to invade Russia while Germany was still fighting Great Britain. Whatever the reason, the German Army Staff recommended that 100 divisions could storm Russia and capture Moscow in 4-6 weeks. Hitler did not agree. He demanded that a 120 division eastern front army launch an attack in two directions into Russia.⁶ The long distances from Germany to Moscow made every operation difficult to carry out. It was not an easy campaign.

There were a few officers on Hitler's staff who studied the logistics requirements and presented their concerns as best they could to him. Major Generals Paulus and Wagner both saw potential supply problems for the German Army, especially if the Russians did not capitulate early in the campaign and had to be fought all the way to Moscow.⁷

This is significant for more than the resupply efforts. Extended lines of communications (LOCs) are

difficult to protect for any army while it fights the close battle. Due to supply and personnel shortages that plagued the Germans throughout the war, combat training and weapons systems were first provided to infantry and armor force units, with the remainder then given to support units. This resulted in few weapons and little or no combat training for support soldiers.⁹ Further challenging the logistics system security, many officers and enlisted soldiers in support units were older reservists or men recalled from retirement and generally not fit for military service.⁹

The initial doctrine used by the Germans to protect rear areas resulted from their evaluation of the threat. The threat was primarily from small groups of Russian soldiers who were separated from their parent units. Acting independently, they were effective in conducting raids and isolated attacks on German logistics activities.¹⁰ Because of these attacks and the large expanses of land the LOCs covered, the Germans committed special security forces to LOC defense.¹¹ Unlike the logistics units they defended, these security forces were better equipped with weapons and trained as infantry. These units, some of which were as large as German infantry divisions, were special combat units given security

guard force missions.¹² The German High Command made these rear area security forces independent from the combat units on the front. Army group rear area commanders had them under their control.¹³ These rear area groups called "Rueckwaertiges Heerresgebiet", made significant contributions to the active defense of rear areas.¹⁴ Supply depots grew in size as the operation progressed, requiring more and more security assets.¹⁵ Security units established guard posts along LOCs to form cordon style defense networks. Rear area security forces manned these posts, freeing up the regular infantry units to fight at the front. This also relieved the logistics soldiers from the burden of defending themselves so they could concentrate on their support missions.

The German High Command foresaw the importance of protecting these depots with combat troops and they did so when they could afford to allocate the combat power to rear areas. By the fall of 1941, entire division size units were guarding supply bases and LOCs.¹⁶

Some initial protection forces were regular combat units rotated from the fighting in the front to guard duty in the rear provided they had proved themselves in combat and there were sufficient troops available. Commanders also granted security guard duty as a reward for front line units in need of a break. Thus, CSS

units initially enjoyed the benefits of having seasoned combat veterans protect them. Even this was not enough to protect the supply areas from the ever increasing raids from Russian soldiers and the growing partisan groups. Guard forces could not protect the 900,000 square miles of German occupied Russian territory.¹⁷

As the war dragged on into the fall of 1941, casualties on the Eastern Front mounted, the LOCs grew in length, and the demand for combat troops at the front increased. This put pressure on German commanders to give security units regular combat missions.

Having combat troops responsible for rear area protection would not last long with mounting casualties and manpower shortages. This luxury was more than the German Army could afford.¹⁸ Rear area security units filled the personnel and combat equipment demands of front line combat units, increasing the risk for rear areas. Commanders were forced by necessity to call these units to the front to replace or reinforce other combat units as needed.

As each day of the operation passed, LOC distances from Germany to the advancing army in Russia increased. Many supply bases grew to the size of small cities and the designated security forces could no longer handle the security tasks.¹⁹ These large supply depots,

other support areas, and transportation networks became the favorite targets of Soviet partisan groups. This increased the need for stronger security throughout the German rear area while security units were being taken from the LOCs to fight on the front.²⁰

Rear area security became everyone's problem and support units gradually assumed the mission to protect themselves. Now in addition to their monumental support roles support units had to defend themselves and their bases. To accomplish this new mission they conducted combat skills training necessary for survival. Were these regular, trained, and equipped troops it would have been a much easier task. However, these were not combat trained soldiers. They were old, untrained and poorly equipped, generally unfit for regular combat duty.²¹

German commanders realized that even strong active defensive measures were not enough to counter the partisan threat facing them. They quickly integrated passive defense measures into plans to protect supplies and rear area troops. CSS units dispersed supplies and stored them underground when possible. They emplaced easily flammable supplies such as fuel and ammunition in dug-in positions to protect them from direct and indirect fire. Supply convoys used the cordon style guard outposts as check points and rest areas. In

addition, deceptive practices such as dummy (empty) cargo shipments and random rerouting of trains aided in disrupting the partisan's plans to cut German LOCs.²² By combining active and passive measures of protection, the Germans kept what supplies they had flowing to the soldiers on the front lines for the first six months of the operation.²³ For the German Army, the worst was yet to come.

Rear area defense, which initially was a separate mission for combat troops, quickly became the logistician's problem to solve. The small scale terrorist attacks on convoys and supply depots that were common at the start of the campaign paled in comparison to the wholesale penetrations the Russians achieved during their counter attacks in December 1941 and during the remainder of the war. Armored thrusts cut deeply into rear areas and easily overran the poorly armed and trained logistic soldiers.²⁴ Supply lines were constantly being cut or threatened, making it very difficult to supply the German Army. The harsh winter of 1941-42 multiplied the problems of keeping LOCs open.

The Germans were not complacent about this problem. The hardships of combat during winter on the Russian steppes, forests, and swamps, for troops on both sides were severe. The German soldiers, both

combat and combat service support, had to improvise to survive against the overwhelming numbers of Soviet forces and the harsh environment to which they were unaccustomed. Their ingenious solution was the strong point defense.²⁵

By December 1941, the Soviets had taken the initiative away from the attacking German army.²⁶ They conducted a strong winter counter offensive that forced the German High Command to change its strategy. The German High Command realized that Moscow was not going to be taken soon. The German Army was stalled by a combination of stiff enemy resistance, extended LOCs and the terrible weather.

Hitler refused to accept a stalemate when he was so close to Moscow in December 1941. Ignoring the advice of his most senior advisors to go on the defensive until the weather improved, Hitler insisted on no retreat, not even to more hospitable or defensible territory.²⁷ Despite this order, many units were conducting retrograde operations across barren, frozen and harsh terrain to escape persistent Soviet counter attacks.²⁸ Hitler's insistence on maintaining a linear defensive line only aggravated further the plight of German units trying to conserve combat power and distribute supplies. Not only did linear defense prove to be too weak to stop counter

attacks it was also void of any depth.²⁹

By the end of the winter of 1941-42 the Germans were employing the strong point defense to survive and meet Hitler's order to hold ground in Russia.³⁰ The strong point defense system consisted of a defensive network of strong points made up of small groups of troops reinforced by local reserve forces. They initially used the shelter of existing structures and constructed team fighting positions. Instead of waiting on a perimeter exposed to the severe weather they scattered these "team defense positions"³¹ in depth in their sector. When attacked they used devastating interlocking fires to slow the enemy. Then they used the reserve force to conduct effective, massed counterattacks to blunt any penetrations. By allowing the enemy to enter into their perimeter they were able to establish effective kill zones with a minimum amount of combat power.

The desperate situation facing German units forced them into using strong point defenses. The technique worked so well that word spread and soon all German units on the Eastern Front employed it. Russian counter attacks routinely exploited the weakened German linear defense perimeters that Hitler initially wanted. Severe Russian weather combined with the degraded and poorly supplied status of the German army, forced units

to seek shelter in towns. Strong points were just a natural outcome of these troop concentrations. The strong point defense had depth and allowed units to take advantage of mutually supporting fires.³²

German forces adopted strong point defenses because of the factors outlined above. They were the only way the Germans could mass combat power to conduct retrogrades and withdrawals. Also, German units were weak in numbers and physical strength. The weather coupled with the lack of winter supplies and constant combat was sapping the strength of even the toughest combat units. They were forced into towns to survive. Death from exposure was common for those who stayed in the open. Finally, linear defenses were not strong enough to stop penetrations. They just did not work.³³

Strong point defense, which started as a field expedient method for survival, quickly became doctrine in the German army for all types of units. By the end of December, 1941, the defenses on the Eastern Front consisted primarily of local strong points.³⁴ Even Hitler came to realize the value of strong point defense as a practical way of protecting both the territory his army gained and his forces remaining. Although initially opposed to it, Hitler changed his opinion.³⁵ He did so because this technique

compensated for the weaknesses of the German Army at the time. The German soldiers were scattered, cold and tired. When gathered in the small towns they could feel the security of being with others and get out of the elements for awhile. In addition, they could now fight as teams, not individuals.³⁶ The increase in morale and upgrade in personal hygiene that being together in towns gave them also played a significant role in their ability to keep fighting.³⁷

Strong point defenses were very effective in repelling Soviet attacks. Even when the Soviets broke into the strong point defense network, the Germans quickly defeated them with interlocking fires and counter attacks. These reserves, although usually lightly armed with only grenades and machine guns, were very effective.³⁸ All types of units used this defense technique, even those categorized as unfit for regular combat duty. It created a defense in depth using the limited combat power available that even combat service support units found effective.³⁹

After recognizing how well the strong point defense worked for small groups of soldiers in towns, the Germans were quick to try this technique outside of built up areas. They added observation posts (OPs) for early warning and were equally successful in repelling enemy attacks many times their strength.⁴⁰

The Germans also turned logistics locations in the rear areas into strong points. These augmented the front trace of strong points by providing depth and protecting CSS assets at the same time.⁴¹ There is even a documented case where cooks were able to defeat Soviet armor forces.⁴²

We can draw some very relevant and important conclusions from this historical example. Weakness in combat power does not preclude self defense. The Germans created viable defenses with a tattered and poorly equipped force. They did this under extremely harsh conditions using combat and combat support soldiers.

The Germans learned 50 years ago that defending perimeters with a thin trace of combat power, as we still do in U.S. CSS units, is as bad as having no defense at all. This certainly applied in Operation Barbarossa. When the Germans tried to maintain a linear defense while weak, they failed. With any mass whatsoever the Soviets could easily break through a German linear defense perimeter and exploit it. When the enemy "massed" against German strong point defenses they faced a "defense in depth" that caught them in interlocking fires which quickly blunted the initial assault. In addition, reserve counter attacking forces could be used as a defeat mechanism against the enemy.

Strong point defense worked well but its use is only one of the valuable lessons from Operation Barbarossa for rear area defense.

Even commanders who desire to commit combat units to defend CSS assets may not have the resources to do so. The allocation of combat power will depend on what is available to the commander. Since situations will dictate what is available, it is prudent not to depend solely on others for the defense of CSS assets. Therefore, self defense by support units is probably the most feasible and suitable basic method for the spectrum of contingencies facing commanders. Unit commanders and their soldiers must take responsibility for their own defense. If they can be augmented by others for defense, so much the better, but they should not count on other units to defend them. It is not always feasible.

In addition, the moral domain also proved to be a significant factor in the success the Germans experienced. The groupings of soldiers in proximity to each other helped them to keep fighting against difficult odds. Fighting as teams instead of as individuals multiplied their net abilities. The moral domain is a significant aspect of a soldier's ability to fight, especially against difficult odds. Soldiers are not machines, they have fears and weaknesses as

well as strengths that should be considered in determining their ability to fight. Although the moral domain aspects of war are tenuous and difficult to predict, they are as important as any other dimension of war.⁴³

Moral Domain of Defensive Combat

I hold it to be one of the simplest truths of war that the thing which enables an infantry soldier to keep going with his weapons is the near presence or presumed presence of a comrade.

S.L.A. Marshall⁴⁴

There have been extensive studies done on the moral aspects of fighting. Although primarily directed toward combat arms soldiers, S.L.A. Marshall's work applies to anyone "under fire."

U. S. doctrine expects soldiers not trained primarily in combat skills to fight as dismounted infantry in their defense. Forward support battalions (FSB), are usually located near their supported combat brigades, close to the fighting.⁴⁵ This, coupled with the limited combat training and weapons in forward support battalions, will cause support soldiers to question their ability to be successful in combat situations.⁴⁶

S.L.A. Marshall (1900-1977) was in and out of military service from World War I through the Vietnam war, eventually attaining the rank of brigadier

general.⁴⁷ From World War II on his military assignments included combat historian and advisor. In this capacity he travelled and spoke freely with combat soldiers before, during and after battle.⁴⁸

From the post-combat interviews Marshall conducted during World War II, he determined soldiers perform best when in the company of others they know and trust. Being in the presence of a trusted "buddy" improved significantly the soldier's performance under fire and increased his survival rate.⁴⁹ This seemingly obvious observation was a consistent finding of Marshall's.⁵⁰ When speaking of the soldier, Marshall states: "He is sustained by his fellows primarily and by his weapons secondarily."⁵¹ This finding supports the German experience with linear versus strong point defense, where soldiers fought as teams on the Russian Front. This is counter to what the U.S. Army advocates for defending CSS assets. Current U.S. doctrine calls for a thin defensive perimeter around all rear area assets.⁵²

Marshall also determined that only approximately 25% of the soldiers will actively engage the enemy with small arms.⁵³ Noted historian Dr. Roger Spiller questions Marshall's work and figures. Spiller, using Marshall's own survey information, asserts that Marshall fabricated much of the data for his "ratio of

fire" statistics."⁴ Regardless of the percentage, not all soldiers are going to engage an attacking enemy, according to Spiller. Factors such as terrain, distance and confusion will prevent some soldiers from providing fires."⁵ This is compounded by a lack of infantry skills training for combat service support soldiers. This is a problem for forward support battalions especially. To aggravate further the lack of combat power in the brigade support area (BSA), many soldiers who operate out of a base spend most of their time physically outside it and are not available to participate in its defense."⁶

Even if the entire FSB were all part of one base, and in the base area during an attack, there is still little combat power."⁷ A unit that starts from a position of weakness in firepower is further degraded, as Marshall and Spiller both point out for different reasons, by some soldiers not returning fire against the attacking force. This failure to fire exacerbates the combat power shortfall in the BSA. Even these important elements are only a part of developing a defensive capability. The moral courage to fight, backed by a reasonable belief that base defense is possible, is needed for nurturing the fighting attitude necessary for survival."⁸ If soldiers do not have faith in their ability to defend themselves, the battle

may be over before any attack begins."⁹

A close examination of our current base defense doctrine is necessary to determine if we have a system that capitalizes on the combat power available in our support units.¹⁰ The lessons from the frozen steppes of Russia during World War II and the moral domain issues raised by S.L.A. Marshall are worthy of incorporation into the evaluation of our doctrine.

Chapter 3

U.S. Doctrine

The foundation of current U.S. doctrine for brigade level CSS defense is the base and base cluster defense concept. FM 90-14 Rear Battle, defines a base as a "geographically small, defensible area with a defined perimeter and established access controls." The FM further explains that the base is "the focal point for base defense planning and training and is responsible for defending against Level I attacks." FM 90-14 also states that bases will be supported by military police (MP) or a tactical combat force (TCF) if faced with Level II or III threats.⁶¹

Definitions of the Threat Levels are:

Level I: Those that can be defeated by base or base cluster defenses alone. Examples are terrorist activities, sabotage, and attacks by enemy controlled agents.⁶²

Level II: Those threats that a base or base cluster needs the help of response forces from military police with supporting fires. Examples include raids, ambushes and reconnaissance missions by small combat units; special or unconventional warfare missions.⁶³

Level III: Threats that require the commitment of the tactical combat force (TCF) in order to be defeated. Examples include large ground, heliborne or airborne attacks and infiltration operations.⁶⁴

Although the above definitions are doctrinal, presently there is an effort to change the threat designation from three levels to a more precise double digit code. The proposed numeric and alpha code would stipulate different levels for the overall threat and threat of terrorism. Under the proposed system there will be nine levels for the overall threat designated in ascending order 1-9. Alpha characters A-D will stipulate the terrorist threat, also in ascending order.⁶⁵ The same problems will confront commanders regardless of the identification system used.

The forward support battalion commander and his S2/3 plan and direct the preparations for BSA defense against all threat levels. Together they manage the resources in the brigade rear area for the defense of all assets there. All units in the BSA are under the operational control (OPCON) of the forward support battalion commander for positioning on the ground and routine security.⁶⁶ These units will vary, but they include parts of the FSB and field trains of the supported brigade. With the FSB S2/3, the FSB

commander allocates terrain to each unit.⁶⁷ Units establish perimeters and begin mission support work while crew served weapons are emplaced, range cards made up and soldiers briefed by their chain of command concerning their role in base defense. Since there is no front "trace" in rear operations, the base commander must plan to defend in all directions.⁶⁸ This, in conjunction with the large dispersion requirements for the systems and supplies such as fuel and ammunition in a BSA, means soldiers will be assigned a position along a thin perimeter line on the outside edge of their base.⁶⁹ Within this perimeter, support soldiers establish their work and support sites. By necessity (and job description) they spend little time on the perimeter.

The perimeter is fully manned during a "stand to" in the predawn hours and again prior to dusk each day. Most soldiers spend very little time at their designated defensive position except at these two times or when an alert is called. On alert, all soldiers in the base rush from their work stations to their perimeter positions. Their positions may be far from their work locations, sometimes 100-500 meters or more, and they must run there without the benefit of cover or concealment.⁷⁰ Unless they are a member of a crew served weapons team, they are typically in individual

fighting positions, guarding a sector with their personal weapon.

The FSB S2/3 is responsible to the FSB commander for base entry and exit locations. He also ensures crew served weapons in the BSA are emplaced to capitalize on their effective ranges. This may mean soldiers from one unit or base are sent to another unit's sector to cover an avenue of approach or landing zone, further separating soldiers from their work sites and leadership.

The FSB commander designates a reaction force from elements most likely to be in the base at all times. Usually they are from the FSB. Their mission is to reinforce the perimeter defense when and where directed by the FSB S2/3 or base cluster commander. They are normally equipped with light machine guns, grenade launchers, radios, and possibly a vehicle. Some units use the M88 track recovery vehicle from the maintenance company of the FSB as part of the reaction force. It is one of the few armored vehicles in the FSB equipped with a crew served weapon, an M2 .50 caliber machine gun.⁷¹ The reaction force must remain separate from the perimeter defense because it must be prepared to move quickly to serve as a counter attack force.⁷² This reaction force can be any size, but is normally between a squad and platoon in

strength. By creating this necessary force, the commander reduces further the amount of available soldiers for the perimeter.

While the supply and maintenance units in the BSA are able to establish fighting positions on the perimeter, the medical units cannot. The Geneva Convention Agreement prohibits medical personnel from bearing arms except in case of personal self defense.⁷³ Most of these soldiers are authorized a handgun, not a rifle for this reason. The medical personnel, if located in the base, are usually assigned medical support and evacuation missions in the event of an attack.⁷⁴

Unless under an immediate threat, most soldiers in the BSA are within the perimeter fulfilling their support functions. Only crew served weapons are manned continuously. By the vary nature of the BSA many soldiers must leave the area to conduct refueling operations and other tasks outside the base perimeter. Every soldier who leaves the base takes his personal weapon with him. This results in a net reduction of combat power in the base defense plan, especially at night when many resupply operations take place. The soldiers who are out leave gaps in the perimeter that must be covered by the troops remaining.

FM 71-100-1 Armor and Mechanized Division

Operations (Coordinating Draft) tasks support units with the mission to "train and be equipped to conduct a sustained defense against numerically superior forces." 75 It also states that the base's "ability to defend itself is the cornerstone of the rear security operations." This places a large responsibility squarely on the shoulders of rear area commanders. It does not give the commander very much guidance how to accomplish this difficult mission.

The command and control challenges of directing the security for a multitude of units, spread out over a large area are many. It is fair to say that the Base Cluster Operations Center (BCOC) must be adequately staffed.76 But there are no positions allocated in the FSB for BCOC personnel. FM 63-20 Forward Support Battalion, states that the FSB S2/3 section can serve as the BCOC. Realistically, the FSB S2/3 is not staffed adequately and must be augmented to fulfill this role properly.77 These soldiers must be pulled from other support roles to perform this function further reducing the manpower pool for the perimeter defense plan.

The BCOC should issue a situation report twice daily to all elements in the base cluster defense area.78 Multiple communications systems must be used including radios, field phones and runners to be as

redundant as possible.

Due to the dispersion of soldiers in a BSA and the limited communications gear authorized in FSBs, other types of signalling devices such as pyrotechnics, sirens or horns can be used to call a defense alert.⁷⁹ Since the brigade rear command post (CP) collocates with the BSA CP, there should be adequate threat information flowing into the BCOC. The BCOC can then pass this information to units in the BSA as part of the twice daily situation update or send it out immediately.

The BCOC develops plans for fire support through the brigade fire support officer (FSO). Targets will be preplanned for base defense by the BCOC and the FSO. The BCOC then fields requests for fire from units in the BSA via field phones, FM radio, or runner.⁸⁰ A Stinger team, if provided from the supported brigade's direct support (DS) air defense battery, will provide air defense coverage.

Military police will normally operate out of the BSA. Each brigade is usually supported by an MP platoon from the division MP company.⁸¹ They assist in traffic control, serve as small reaction forces, conduct mounted patrols and perform other security missions. Under the control of the supported brigade, the amount of time they spend on BSA security will

vary."²

Doctrinally, the BSA will require as much ground space as the situation dictates. In most cases it will take up an area approximately 4-7 kilometers in diameter."³ The FSB S2/3 is the BSA terrain manager. He assigns each unit an area and defense sectors."⁴ This function is but one of many the FSB S-2/3 is concerned with and it is a time consuming challenge. His job is complicated by units constantly moving in and out of the BSA and the difficulty of managing the collection of dissimilar units from a variety of commands. This is a significant duty for the FSB S-2/3 that often does not get enough priority. A maneuver battalion S/3 has more assets to handle similar missions. The maneuver battalion staff is much larger, they have more communications gear, weapons and unity of command than the FSB has.

The FSB S2/3 manages the defensive fires of the entire base cluster by coordinating the fires of each base. Using every available weapons system, including those in the BSA for DS maintenance, the S2/3 develops a perimeter defense plan."⁵

FM 63-20 estimates that approximately 25% of the FSB soldiers will be used for routine defense duties with little or no threat and this figure increases with the threat level."⁶ This drains off mission support

manhours available to the supported brigade. FM 63-20

freely states that the FSB is

neither staffed nor equipped to continue to support operations at normal levels while responding to increased levels of threat.⁶⁷

Thus the capability to support combat units actually starts at 75% and decreases as the threat increases.

The doctrine specifies that the small FSB staff manages the BSA for common defense of units located there. The perimeter, once established, is guarded by units given a sector to defend. The FSB S2/3 serves as the fire support integrator and conduit for intelligence collection and dissemination. By doctrine, the FSB, with its OPCON units, must defend an area larger than would normally be given to some maneuver battalions. This requires an enormous amount of combat arms skill and training that in practice is rarely found in support units. Observations from the NTC will highlight the risk we take by implementing our current doctrine.

APPLICATION OF DOCTRINE

The thing the scares me the most is not knowing what I might find in the BSA. With all the trucks and things going everywhere we just never know where a tank might be hidden. We lost a company, in fact we lost an entire company one day to a disabled tank operated by a maintenance team.

CPT Sullivan
NTC Opposing Force (OPFOR)**

CPT Sullivan, an experienced OPFOR battalion commander at the NTC, has repeatedly lead his unit in attacks against BSAs. He thus sees base defense from the attacker's viewpoint. With few exceptions, he has found BSA perimeters to be easy targets. During a recent discussion held at the NTC, immediately following a successful attack through a blue task force by Sullivan's unit, he related how simple it was to break through BSA perimeters and keep his battalion formation together to attack other targets. Clearly, most BSA defenses he encountered could not stop his attack.

Members of the NTC OPFOR and training staff have the opportunity to observe many different units conduct BSA defenses and CPT Sullivan's observations are not uncommon.** They see the same types of problems in many units that are there for training. There are several consistent deficiencies exhibited by FSBs practicing our doctrine as seen by NTC trainers. Some of the most pertinent observations from the NTC and other training exercises are listed below:**

1. Planning and conduct of base and base cluster defenses are poor.
2. Integration of base defense plans is lacking.
3. Security of CSS outside the base perimeter is weak.
4. Collection and dissemination of intelligence

information is poor.

5. There is a lack of adequate crew served weapons, radios and other defensive equipment in CSS units.

These issues are related to the use of our doctrine given the resources available to implement it. The FSB is not staffed to conduct simultaneous defense and support operations. Furthermore the supported brigade's priorities are going to be necessarily focused toward their combat missions, not defending the rear area. This results in the FSB commander being faced with the challenge of defending a large area with few personnel and even fewer combat assets. Although defense is a primary concern for the FSB leadership, the battalion is still on the battlefield to support other units, not devote significant portions of its time and resources to its own security. If it did, it could not possibly provide adequate support. There is another complicating issue. Officers and non commissioned officers in the FSB are, with few exceptions, not trained to plan and execute a defense as complex as that envisioned by our doctrine. The sheer size of the BSA and diversity of units operating there are significant complicating factors in and of themselves.

CSS units insist on a manned perimeter to defend themselves. From active duty to reserve and guard

units, there is a penchant for developing a perimeter trace around all assets in the BSA.²¹ Many active and reserve unit standard operating procedures (SOPs) emphasize the requirement to defend definable perimeters. FM 71-100-1 states clearly that the base commander is responsible for defining the base perimeter and assigning sectors to subordinate elements to defend.²² By practicing our doctrine of defending base perimeters²³, with thin lines of combat power, CSS units are actually "trying to defend everywhere but defend nowhere."²⁴

Combat and combat service commanders should realize that trying to establish a "no penetration" line around the BSA is not always possible. Therefore, the doctrine must be revised.

Chapter 4

Analysis and Conclusions

CSS units accept a large risk of not being able to defend themselves by following current base defense doctrine. Perimeter defense as espoused by current doctrine is not practical considering the reality of the circumstances of the BSA. Although it is suitable and desired for combat trained units to defend CSS assets, this method does not pass the test for acceptability or feasibility. There will never be enough combat units to protect all the CSS assets in the BSA or anywhere in the rear area and still support the rest of the battlefield framework. Units must be able to defend themselves.

Doctrine, as currently written for base defense, establishes a very difficult standard for CSS units to attain in defending the BSA. The FSB, plus OPCON units, is spread out on extended perimeters with little combat power. This thin line cannot adequately surround and protect everything of value in the BSA.

With little combat power and even scarcer training in infantry type skills, CSS units have an unrealistically tough mission. In reviewing the historical example, Operation Barbarossa, we see that

units must take responsibility for their own protection. This is the only feasible solution for two primary reasons. First, combat units cannot be assigned to safeguard every logistic asset or activity. There are just too many small contingents moving around on the battlefield, in and out of the BSA, taking care of their missions, for them to protect. As more combat units are committed to base defense, the overall amount of CSS required increases. It becomes an upward spiral of increased logistics requiring increased defense requiring increased logistics. Second, as happened in Operation Barbarossa, combat units may be pulled from security duty to conduct other missions. Though Germany was committing every available asset in support of Operation Barbarossa, it still could not afford to have combat units guarding rear areas for very long. For these reasons it is not acceptable to depend solely on others for defending the BSA. It is very acceptable for combat units to fulfill this role when available. To depend on them, however, is not prudent. There needs to be redundancy in protection and it starts with a self defense attitude, matched with self defense capability in every unit in the army.

If self protection is the most feasible method for protection against Level I threats, it must be carried out in such a manner as to capitalize on the

capabilities of support soldiers. In Operation Barbarossa, old and troops generally unfit for front line duty became fighters who survived Soviet attacks. The German units were weak in combat power, as are our support units, yet they were able to adequately complete their missions while maintaining a basic level of security. The U.S. Army can learn much from the German defense techniques used on the Eastern Front during World War II.⁵⁵

The same principles and tenets of war that guide combat units toward success should be used by CSS units.⁵⁶ Rear area operations requires an influx of the techniques employed by combat arms units. By incorporating the principles and tenets of war into base defense, CSS units can improve their ability to defend themselves and optimize the time and resources available to conduct support operations. The issue is not solely the defense of CSS units. It transcends that to their ability to provide support to others. Doing both is absolutely essential.⁵⁷

Units must disperse to survive, but the soldiers themselves generally do not need to disperse. Small teams work together to repair vehicles, receive, store and issue supplies and perform other CSS missions. Having these cohesive teams separate to defend an extended perimeter destroys the strength soldiers

gather from each other when together, especially while facing a difficult situation. Alone, away from their work sites, they will have to face enemy attacks as individuals, generally with nothing more than M16 rifles. The moral domain aspects that S.L.A. Marshall observed, make this technique suspect. But together as teams, centered on strong points, CSS soldiers can support each other in defending their area. By focusing on the perimeter instead of the fighting systems and soldiers in CSS units we dilute combat power and lose a great opportunity to develop the strengths of the FSB. We also forfeit the advantages of a defense in depth.**

Strong point defense capitalizes on the systems in the BSA. Weak and broken German units used it successfully under the most trying circumstances and so too can U.S. Army CSS units. Many benefits can be realized by using this technique versus the "man the perimeter" technique currently used. By building strong points near work sites that are carefully chosen for defense and mission support, soldiers will be able to defend themselves and accomplish their vital support tasks. The following are some benefits of using this technique.**

1. Soldiers work near their fighting positions. This allows them to quickly enter the fight and obtain

some immediate protection from direct and indirect fires. In addition only one protective/fighting position must be prepared instead of two.¹⁰⁰ This also results in a gain of support operations manhours since there is a decreased need for large numbers of soldiers to be on the perimeter.

2. By working and fighting as teams soldiers will reinforce each other physically and morally, reducing the fear and paralyzing effects of combat that S.L.A. Marshall found during his studies.

3. Strong points allow commanders to mass combat power. Careful positioning will result in a network of fire sacks that can capitalize on the small arms fire organic to the FSB.

4. While strong point teams are engaging attackers with interlocking fires, the base reaction force can be employed as a defeat mechanism.

5. The enemy will have a more difficult time identifying where the base is most vulnerable to attack. Scattered work/strong point positions throughout the BSA will force the attacker to be concerned about every vehicle and work area he encounters. Defenders can and should also incorporate disabled combat vehicles and weapons into the defense plan.¹⁰¹

6. Strong point defense teams can be more easily

tied into the BCOC with field phones and radios to send reports and receive battle instructions and orders. Also they can better keep track of assets and conduct internal support and resupply operations for the defense.

7. Soldiers' fire can be directed by the NCOs in the strong points.

8. If some soldiers are outside the base during an attack the defense plan is not necessarily more vulnerable. Since strong points can be positioned to reinforce each other, the lack of soldiers does not automatically create a gap in the defense as it would if the perimeter defense method was used.¹⁰²

CONCLUSIONS

Our doctrine for base defense is based on the essentially sound assumption that CSS units must be able to defend themselves. The self defense requirement for CSS units is justified. CSS units obviously cannot depend solely on combat forces for their protection. It is neither an acceptable nor feasible solution to the difficult task of base defense. When combat forces are available they should be used to augment a sound self defense plan, but they cannot be the sole source of defense. Our doctrine should not, however, emphasize perimeter defense as it does currently for CSS units. The days of circling the

wagons to protect the supplies are over. CSS units have little combat power and what they do have must be massed and controlled to defeat, delay or destroy Level I threats or the BSA may not survive to fulfill its support missions.

Soldiers who fight as part of a team are much more effective than those who are separated physically and psychologically from their comrades. In addition, CSS soldiers, not routinely trained in fighting skills, will be more effective combatants when under the strong leadership of their own NCO's.

Strong point defense is not a panacea for base defense but it is much more appropriate than the perimeter method most commonly used today. Commanders should consider employing the strong point defense technique for their CSS units when developing base and base cluster defense plans. Concurrent with this is mandating enhanced combat skills training for CSS troops. They must be as proficient in defense techniques as their combat arms comrades are. With the appropriate training, the strong point defense technique is suitable because it will give CSS units the best opportunity of defending themselves while maximizing their support capabilities to their brigade. It is an acceptable and feasible solution because it requires no force structure changes or major revisions

in doctrine. All army units, including CSS units, must retain the ability to fight and win. By using the strong point defense technique, CSS units will be able to provide support while at the same time defending themselves.

ENDNOTES

1. Department of the Army, FM 71-100-1 Armor and Mechanized Division Operations (Coordinating Draft) (Washington, D.C.: U.S. Government Printing Office, May 1991), p. A-11.
2. Department of the Army, FM 100-5 Operations, (Washington D.C.: U.S. Government Printing Office, 5 May 1986), p. 174.
3. Department of the Army, FC 100-2-99 North Korean Peoples Army Operations, (Washington, D.C.: U.S. Government Printing Office, 5 Dec 1986) p. 1-1.
4. Department of the Army, FM 100-2-2 The Soviet Army, (Washington D.C.: U.S. Government Printing Office, 16 July 1984), pp. 1-1, 2-1, 2-2, 2-3.
5. Department of Defense, AFSC PUB 1 The Joint Staff Officer's Guide 1991, (Washington, D.C.: U.S. Government Printing Office, 1991, p. 6-25.
6. Bryan I. Fugate, Operation Barbarossa, strategy and Tactics on the Eastern Front, 1941, (Novato: Presidio Press, 1984), pp. 63-64.
7. Fugate, pp. 70-73.
8. Department of the Army, DA PAM 20-240, Historical Study, Rear Area Security in Russia, (Washington D.C.: U.S. Government Printing Office, July 1951) p. 13.
9. DA PAM 20-240, p. 13.
10. DA PAM 20-240, p. 13.
11. DA PAM 20-240, p. 4.
12. Department of the Army, DA PAM 20-216a The German Campaign in Russia--Planning and Operations (1940-1942), (Washington D.C.: U.S. Government Printing Office, March 1955), p. 132.
13. DA PAM 20-240, p. 5.
14. DA PAM 20-240, p. 5.

15. DA PAM 20-240, pp. 5-7.
16. DA PAM 20-240, pp. 7-9. and DA PAM 20-261a, p. 132.
17. Matthew Cooper, The German Army 1933-1945, (Chelsea: Scarborough House/Publishers, 1990), p. 285.
18. DA PAM 20-240, p. 7.
19. The above is the authors interpretation of what occurred based on the information in DA PAMs 20-240 and 20-244.
20. Howell, p. 52.
21. Summarized from DA PAM 20-240, pp. 1-15.
22. DA PAM 20-240, pp. 9-12.
23. DA PAM 20-240, p. 13.
24. Cooper, p. 343.
25. Stephen C. Danckert, CSS Units and Rear Area Protection, Military Review, April 1991, p. 59.
26. Timothy A. Wray, Standing Fast: German Defense Doctrine on the Russian Front During the Second World War, Pre War to March 1943, Research Survey Number 5, (FT Leavenworth: Command and General Staff College, Combat Studies Institute, September 1986), p. 57.
27. Cooper, p. 343 and Wray p. 57.
28. Cooper, p. 336 and Wray, p. 71.
29. Wray, p. 69.
30. Wray, pp. 57, 68.
31. The author's term.
32. Wray, pp. 65-71.
33. Wray, pp. 71-72.
34. Wray, p. 75.
35. Wray, p. 75.
36. Wray, pp. 74-75.

37. Wray, pp. 73-75.
38. Wray, p. 77.
39. DA PAM 20-261a, p. 129.
40. Wray, p. 79.
41. DA PA 20-261a, pp. 129-130 and Wray, p. 87.
42. PA 20-233, p. 34.
43. The author feels strongly that the moral domain should be considered when developing plans for future operations and evaluating a unit's combat status. Numbers of weapons, pieces of equipment, and personnel strength reports are only part of the picture a commander needs to make decisions. Fear, fatigue and willingness to fight are also important factors to consider.
44. S.L.A. Marshall, Men Against Fire: The Problem of Battle Command in Future War, (Gloucester: Peter Smith, 1947, reprinted 1978), p. 42.
45. FM 71-3, p. 5-22.
46. This is based on the author's personal experience as a company commander of a forward deployed, divisional supply and service company.
47. F.D.G. Williams, SLAM. The Influence of S.L.A. Marshall on the United States Army, (FT Monroe: United States Army Training and Doctrine Command, 1990), pp. v, 24-25, 130-131.
48. Williams, pp. v, 19-24.
49. Marshall. pp. 152-153.
50. Marshall, p. 42.
51. Marshall, p. 43.
52. Department of the Army, FM 90-14. Rear Battle, (Washington, D.C.: U.S. Government Printing Office, June 1985), p. 4-2.
53. Marshall, p. 50.
54. Roger J. Spiller, S.L.A. Marshall and the Ratio of Fire, Journal of the Royal Uniformed Services Institute, Winter 1988, p. 68.

55. Spiller, p. 68.

56. This is based on the personal experience of the author as a company commander and support operations officer in a forward deployed divisional Forward Support Battalion.

57. The FSB is authorized very few weapons systems. The heaviest being the M2 .50 caliber machine gun and the M203 40 millimeter grenade launcher.

58. Marshall, p. 154.

59. Marshall, p. 67, and the author's personal experiences as a company commander in a forward support battalion. The combat/infantry skills training conducted in the author's battalion, including day and night live fire exercises, dramatically increased the morale of the soldiers involved.

60. Divisional support units have few crew served weapons. The M2 50 caliber machine gun is the largest organic weapons system they have. Some units actively train on larger weapons systems such as M1 tanks and M2 Bradleys in case they have maneuver disabled vehicles that are being worked on in base locations.

61. FM 90-14, p. 4-2 and FM 71-100-1 (Coordinating Draft), pp. A-11-12.

62. Department of the Army, FM 71-100 Division Operations, (Washington, D.C.: U.S. Government Printing Office, June 1990) p. 1-11.

63. FM 71-100, p. 1-11.

64. FM 71-100, p. 1-11.

65. FM 71-100-1 (Coordinating Draft), pp. A-16-A-17, and Center for Army Lessons Learned unpublished and an undated draft document titled Rear Operations, p 8.

66. FM 71-3, pp. 5-21, 5-22.

67. Department of the Army, FM 63-20 Forward Support Battalion, (Washington D.C.: U.S. Government Printing Office, 26 February 1990), p. 5-11.

68. FM 71-100-1 (Coordinating Draft), p. A-19.

69. FM 71-100-1 (Coordinating Draft), p. A-19.

70. Thomas A. Hooper, The Principles of War and Rear Area Protection: Have We Achieved Economy of Force?, AOSF Monograph, (FT Leavenworth: U.S. Army Command and General Staff College, 17 January 1988), p. 16. and the author's personal experience during numerous field exercises.

71. This is based on the author's experience in conducting base defense live fire exercises. The presence of an armored vehicle joining in the fight on a simulated perimeter defense proved to be a large morale as well as firepower multiplier. However, the M88 may not always be in the BSA to fulfill this role. When it is not, a M35A2 truck with M2 machine gun can be substituted with degraded, but similar results.

72. FM 63-20, p. 5-11.

73. FM 63-20, p. 5-14.

74. This is based on the author's experience in units he has been assigned and of observing other units conduct operations.

75. FM 71-100-1 (Coordinating Draft), p. A-18.

76. FM 71-100-1 (Coordinating Draft), p. A-21.

77. FM 63-20, p. 5-2.

78. FM 63-20, p. 5-2.

79. FM 63-20, p. 5-2.

80. FM 63-20, p. 5-9. and the author's experience.

81. FM 63-20, p. 5-10.

82. FM 63-20, p. 5-10.

83. FM 63-20, p. 5-7.

84. FM 63-20, p. 5-11.

85. FM 63-20, p. 5-11.

86. FM 63-20, p. 5-12.

87. FM 63-20, p. 5-11.

88. CPT Sullivan, an experienced OPFOR battalion commander at the NTC, said this in response to questions concerning attacking base defenses. This discussion took

place in September 1991 immediately following a successful attack through a blue force Task Force by Sullivan's unit. CPT Sullivan was clearly concerned about facing armored strong points in the BSA. The clutter he found when breaking into the BSA made it difficult for his tank crews to determine the most appropriate targets.

89. Combined Arms Center, CALL Bulletin 2-86, (FT Leavenworth: Combined Arms Training Activity, November 1986), p. 10-11.

90. CALL Bulletin 2-86, p. 10-11.

91. Unit SOPs from the XVII Airborne Corps and the 116 RAOC (National Guard) both emphasize the requirement to defend definable perimeters of bases and base clusters. Strong points were mentioned slightly but not given the importance that the author feels they deserve.

92. FM 71-100-1, p. A-21.

93. This is based on the author's own experience, discussing the subject with many of his peers and reviewing unit SOPs.

94. A quote used often by senior NTC trainers when discussing defensive techniques by units undergoing rotations there. The author can attribute this statement to MAJ Craig Gephart at the NTC.

95. Danckert, p. 59-60.

96. FM 100-5, pp. 15-17 and 173-177.

97. Hooper, p. 11.

98. Danckert, p. 59.

99. These advantages are similar to those identified by LTC Thomas A. Hooper in his monograph The Principles of War and Rear Area Protection. Hooper's and the author's findings basically support each other as to the benefits of strong point defense for CSS base defense.

100. Hooper, p. 33.

101. See endnote 89.

102. Hooper makes a much stronger case as to the merits of a strong point defense plan with soldiers operating outside of the base than the author of this monograph does. The troop strength of a FSB is so low to begin with

that every soldier is crucial for defense and mission work. Although strong point defense is the best technique for defending CSS bases, in the author's opinion, it still requires soldiers with weapons who are trained and prepared to fight. Empty strong points are of little value unless used in a small scale deception plan.

BIBLIOGRAPHY

Books

Cooper, Matthew The German Army, 1933-1945. Chelsea: Scarborough House/Publishers, 1990.

English, John A. On Infantry. New York: Praeger Publishers, 1981.

Fugate, Bryan I. Operation Barbarossa. Strategy and Tactics on the Eastern Front, 1941. Novato: Presidio Press, 1984.

Griffith, Paddy. Forward into Battle. Fighting Tactics from Waterloo to Vietnam. Strettington: Anthony Bird Publications LTD, 1981.

Howell, Edgar M. The Soviet Partisan Movement 1941-1944 (DA PAM 20-244). Washington, D.C.: U.S. Government Printing Office, 1956.

Heiser, Joseph M. Jr. LTG U.S. Army. Vietnam Studies: Logistics Support. Washington, D.C.: U.S. Government Printing Office, 1984.

Huston, James A. The Sinews of War: Army Logistics, 1775-1953. Washington, D.C.: U.S. Government Printing Office, 1966.

Manstein, Erich von. Lost Victories. Novato: Presidio Press, 1982.

Marshall, S.L.A. Men Against Fire. Gloucester: Peter Smith, 1978.

Ruppenthal, Roland G. United States Army in World War II. The European Theater of Operations. Logistical Support of the Armies. Vol I: May 1941-Sep 1944. Washington, D.C.: U.S. Government Printing Office, 1953.

Sun Tzu. The Art of War. Translated by Samuel B. Griffith. London: Oxford University Press, 1971.

Sydor, Charles W. Jr. Soldiers of Destruction. The SS Death's Head Division, 1933-1945. Princeton: Princeton University Press, 1977.

Van Creveld, Martin. Supplying War - Logistics from Wallenstein to Patton. Cambridge: Cambridge University Press, 1980.

Government Publications

National Defense University. AFSC Pub 1. The Joint Staff Officer's Guide 1991. Washington, D.C.: National Defense University, 1991.

U.S. Army. DA PAM 20-216a. The German Campaign in Russia--Planning and Operations (1940-1942). Washington, D.C.: Department of the Army, March 1955.

_____, DA PAM 20-233. German Defense Tactics Against Russian Breakthroughs. Washington, D.C.: Department of the Army, 1951.

_____, DA PAM 20-234. Historical Study. Operations of Encircled Forces. German Experiences in Russia. Washington, D.C.: Department of the Army, January 1952.

_____, DA PAM 20-240. Historical Study. Rear Area Security in Russia. Washington, D.C.: Department of the Army, July 1951.

_____, FC 100-2-99. North Korean Peoples Army Operations. Washington, D.C.: Department of the Army, December 1986.

_____, FM 63-20. Forward Support Battalion. Washington, D.C.: Department of the Army, 26 February 1990.

_____, FM 63-21. Main Support Battalion. Washington, D.C.: Department of the Army, 7 August 1990.

_____, FM 71-3. Armored and Mechanized Infantry Brigade. Washington, D.C.: Department of the Army, 11 May 1988.

_____, FM 71-100. Division Operations. Washington, D.C.: Department of the Army, 16 June 1990.

_____, FM 71-100-1. Armor and Mechanized Division Operations (Coordinating Draft). Washington, D.C.: Department of the Army, May 1991.

_____, FM 90-14. Rear Battle. Washington, D.C.: Department of the Army, 10 June 1985.

_____, FM 100-5 Operations. Washington, D.C.: Department of the Army, 5 May 1986.

_____, FM 100-10, Combat Service Support.
Washington, D.C.: Department of the Army, 18 February 1988.

_____, FM 100-2-1, The Soviet Army, Operations and Tactics. Washington, D.C.: Department of the Army, 18 June 1990.

_____, FM 100-2-2, The Soviet Army. Washington, D.C.: Department of the Army, 16 July 1984.

U.S. Navy. FMFM 1 Warfighting. Washington, D.C.: Department of the Navy, 6 March 1989.

Theses, Manuscripts and Papers

Brudvig, Dale K. "The Brigade With or Without Combat Support and Combat Service Support". Carlisle Barracks: U.S. Army War College, 28 May 1976.

Center for Army Lessons Learned. "Bulletin No 2-86", FT Leavenworth: Combined Arms Center, November 1986.

Hooper, Thomas A. "The Principles of War and the Rear Area Protection: Have We Achieved Economy of Force?" School of Advanced Military Studies monograph, FT Leavenworth: CGSC 17 January 1988.

Offenbacher, Genlt. "Eighth Army RR Area (Oct 43 - 8 May 45)" (MS#B-167). Translated by A. Rosenwald. Historical Division, Headquarters Army Europe, Foreign Military Studies Branch, 23 April 1946.

Pal, K. Et Al. "Yongsan Rear Area Operations" (24th Infantry Division)" U.S. Army Command and General Staff College, FT Leavenworth: Combat Studies Institute, May 1984.

Rosin, Jo B. "Soviet Threat to Combat Service Support Forces: A Training Challenge". Air University, Maxwell Air Force Base: Air War College, May 1988.

Willemer, Wilhelm. "Divisional Operations During the German Campaign in Russia" (MS#P-143c). Translated by George C. Vanderstadt. Historical Division, Headquarters, United States Army Europe, Foreign Military Studies Branch, undated.

Williams, F.D.G. "SLAM, The Influence of S.L.A. Marshall on the United States Army". Office of the

Command Historian, FT Monroe: United States Army Training and Doctrine Command, 1990.

Wray, Timothy A. "Standing Fast: German Defense Doctrine on the Russian Front During the Second World War, Pre War to March 1943", Research Survey Number 5, FT Leavenworth: Command and General Staff College, Combat Studies Institute, September 1986.

Articles

Briggs, John H. "Fighting the Rear Battle, Self Protection on the Airland Battlefield", Ordnance, (February 1988): 2-9.

Danckert, Stephen C. "CSS Units and Rear Area Protection", Military Review, (April 1991): 59-62.

Harned, Glenn M. "Offensive Rear Battle", Military Review, (February 1986): 30-35.

House, John M. "Fighting in Rear". Army Logistician, (November-December 1986): 17-21.

Mooradian, Moorad. "Rear Area Security With an Elastic FEBA". Military Review, (September 1978): 43-49.

Rada, Ronald G. "Evolutions of Rear Operations Data". Quartermaster Professional Bulletin, (Spring 1991): 45-46.

Spiller, Roger J. "S.L.A. Marshall and the Ratio of Fire". Journal of the Royal Uniformed Services Institute, (Winter 1988): 63-71.

Stephenson, George M. "Protecting the Brigade Support Area". Army Logistician, (May-June 1983):

Unpublished

U.S. Army, "Rear Operations" Uncirculated Draft, FT Leavenworth: Center For Army Lessons Learned (CALL), undated.